

# Menu

A flexible and feature-rich dropdown menu component for creating context menus, navigation dropdowns, and action menus. Supports icons, descriptions, multi-column layout, various positioning options, and full accessibility.

## How to use

### Basic Usage

The Menu component provides a dropdown interface that can be positioned relative to a trigger element. It supports various menu items with different states and configurations.

- Default behavior: Bottom positioning, single column layout, with icons and titles.
- Usage: Pass an array of menu items to the items input and control visibility with the visible input.

```
import { AavaMenuComponent } from "@aava/play-core";
```

### With Icons

Menu items can display icons alongside their labels for better visual recognition and user experience.

- How: Add an icon property to menu items with the icon name.
- When to use: For quick recognition, consistent visual language, or when space allows.

```
<div class="menu-container">  
  <button (click)="toggleMenu()">Open Menu</button>  
  
  <aava-menu  
    [items]="menuItems"  
    [visible]="showMenu"  
    (itemSelected)="handleItemSelected($event)">  
  </aava-menu>  
</div>
```

### With Descriptions

Menu items can include descriptions to provide additional context or information about each option.

- How: Add a description property to menu items.
- When to use: For complex menus where items need additional explanation or context.

```
import { Component } from "@angular/core";
import { AavaMenuComponent } from "@aava/play-core";

@Component({
  selector: "app-menu-basic",
  standalone: true,
  imports: [AavaMenuComponent],
})
export class MenuBasicComponent {
  showMenu = false;

  menuItems = [
    { label: "Dashboard", route: "/dashboard" },
    { label: "Profile", route: "/profile" },
    { label: "Settings", route: "/settings" },
    { label: "Help", route: "/help" },
    { label: "Logout", route: "/logout" },
  ];

  toggleMenu() {
    this.showMenu = !this.showMenu;
  }

  handleItemSelected(event: any) {
    console.log("Selected:", event.label);
    this.showMenu = false;
  }
}
```

## Disabled Items

Menu items can be disabled to indicate unavailable options or actions that require certain conditions.

- How: Set disabled: true on menu items.
- When to use: For conditional actions, permission-based menus, or unavailable features.

```

<div class="menu-container">
  <button (click)="toggleMenu()">Menu with Icons</button>

  <aava-menu
    [items]="menuItems"
    [visible]="showMenu"
    [displayOptions]="{ showIcon: true, showTitle: true }"
    (itemSelected)="handleItemSelected($event)">
  </aava-menu>
</div>

```

## Features

### Flexible Positioning

- 8 Position Options : top, bottom, left, right, and their start/end variants
- Alignment Control : start, center, end alignment within positioned area
- Offset Configuration : Customizable spacing from trigger element
- Auto Flip : Automatic position adjustment when space is limited

### Rich Content Support

- Icons : Lucide icons with customizable size and colors
- Descriptions : Additional text for context and explanation
- Active States : Visual indication of currently active/selected items
- Disabled States : Clear indication of unavailable options

### Layout Options

- Multi-Column : Configurable column layout for extensive menus
- Responsive Design : Adapts to different screen sizes and orientations
- Flexible Sizing : Automatic width adjustment based on content
- Custom Styling : Extensive CSS custom properties for theming

### Accessibility

- Keyboard Navigation : Full keyboard support with arrow keys
- Screen Reader : Proper ARIA attributes and semantic structure
- Focus Management : Clear focus indicators and logical tab order
- High Contrast : Support for high contrast mode and color preferences

## API Reference

## Inputs

Property	Type	Default	Description
items	MenuItem[]	[]	Array of menu items to display
visible	boolean	false	Controls menu visibility
itemsPerColumn	number	3	Number of items per column in multi-column layout
positionConfig	MenuPositionConfig	See default config below	Configuration for menu positioning
displayOptions	MenuItemDisplayOptions	See default options below	Configuration for item display
customStyles	Record<string, string>	{}	Custom CSS styles to apply to the menu

## Outputs

Property	Type	Description
itemSelected	EventEmitter<{route?: string; label: string; item: MenuItem}>	Emitted when a menu item is clicked

## MenuItem Interface

## MenuPositionConfig Interface

## MenuItemDisplayOptions Interface

## Default Configurations

## CSS Custom Properties

The component uses CSS custom properties for theming:

Property	Description
--menu-min-width	Minimum width of the menu
--menu-background	Background color of the menu
--menu-border-radius	Border radius of the menu
--menu-shadow	Box shadow of the menu
--menu-border	Border of the menu
--menu-padding	Padding inside the menu
--menu-margin-top	Top margin for positioning
--menu-transform-y	Transform distance for animations
--menu-transition	Transition timing for animations
--menu-z-index	Z-index for layering
--menu-columns-gap	Gap between columns
--menu-column-min-width	Minimum width of each column
--menu-item-gap	Gap between icon and content
--menu-item-padding	Padding of menu items
--menu-item-border-radius	Border radius of menu items
--menu-item-background	Background of menu items
--menu-item-color	Text color of menu items
--menu-item-hover-background	Background on hover
--menu-item-hover-color	Text color on hover
--menu-item-active-background	Background when active
--menu-item-active-color	Text color when active
--menu-item-disabled-background	Background when disabled
--menu-item-disabled-color	Text color when disabled
--menu-item-margin	Margin of menu items

Property	Description
--menu-item-first-margin-top	Top margin of first item
--menu-item-last-margin-bottom	Bottom margin of last item
--menu-item-transition	Transition timing for items
--menu-item-icon-size	Size of item icons
--menu-item-icon-color	Color of item icons
--menu-item-icon-active-color	Color of active item icons
--menu-item-icon-transition	Transition timing for icons
--menu-item-hover-icon-filter	Icon filter on hover
--menu-item-active-icon-filter	Icon filter when active
--menu-item-content-gap	Gap between title and description
--menu-item-title-font-weight	Font weight of titles
--menu-item-title-font-size	Font size of titles
--menu-item-title-color	Color of titles
--menu-item-title-active-color	Color of active titles
--menu-item-title-active-font-weight	Font weight of active titles
--menu-item-title-line-height	Line height of titles
--menu-item-title-transition	Transition timing for titles
--menu-item-description-font-size	Font size of descriptions
--menu-item-description-color	Color of descriptions
--menu-item-description-active-color	Color of active descriptions
--menu-item-description-line-height	Line height of descriptions
--menu-item-description-transition	Transition timing for descriptions

## Best Practices

## Content Guidelines

- Clear Labels : Use concise, descriptive labels for menu items
- Consistent Icons : Use consistent iconography throughout the menu
- Helpful Descriptions : Provide context when items need explanation
- Logical Grouping : Group related items together in the menu

## Interaction Design

- Trigger Elements : Ensure trigger elements are clearly identifiable
- Positioning : Choose positioning that doesn't obscure important content
- Keyboard Support : Test keyboard navigation thoroughly
- Touch Support : Consider touch interactions on mobile devices

## Accessibility

- ARIA Labels : Provide appropriate ARIA labels for screen readers
- Focus Management : Ensure proper focus handling when menu opens/closes
- Color Contrast : Maintain sufficient contrast for all text and icons
- Motion Sensitivity : Respect user motion preferences

## Performance

- Efficient Rendering : Use OnPush change detection for better performance
- Event Handling : Properly handle click events to prevent bubbling
- Memory Management : Clean up event listeners and subscriptions
- Lazy Loading : Consider lazy loading for large menus

## Use Cases

### Context Menus

Right-click context menus for actions on selected items:

### Navigation Dropdowns

Dropdown navigation menus for main navigation:

### Action Menus

Action menus for buttons or toolbar items:

### Application Launchers

Multi-column menus for application or feature launchers:

## **Accessibility Guidelines**

### **Keyboard Navigation**

The menu supports full keyboard navigation:

- Enter/Space : Activate the currently focused menu item
- Arrow Keys : Navigate between menu items
- Escape : Close the menu
- Tab : Move focus to next focusable element

### **Screen Reader Support**

The component provides comprehensive screen reader support:

- ARIA Labels : Proper labeling for menu and menu items
- Role Attributes : Correct ARIA roles for menu structure
- State Announcements : Clear announcements of menu state changes
- Focus Indicators : Visible focus indicators for keyboard users

### **Color and Contrast**

- WCAG Compliance : All text and icons meet WCAG AA contrast ratios
- High Contrast Mode : Component works with system high contrast settings
- Color Independence : Information is not conveyed by color alone

### **Motion and Animation**

- Respects Preferences : Animation respects user motion preferences
- Reduced Motion : Provides alternative interaction for motion-sensitive users
- Clear Feedback : Visual feedback is immediate and clear